SF Environment

SF Environment Annual Report 2002

Our Home, Our City, Our Planet

SFE Mission Statement

SF Environment's mission is to improve, enhance, and preserve the environment, and to promote San Francisco's term wellbeing.

SF Environment does this by developing innovative, practical and wide-ranging environmental programs, fosterin groundbreaking legislation, and educating the public by providing comprehensive and easily accessible informatic a wide range of sustainable practices.

In addition to our historic function of providing environmental policy direction for the Mayor and Board of Superv SF Environment delivers service programs for San Francisco residents and businesses including recycling, toxics reduction, environmental justice grants, and energy efficiency.

Some of SF Environment's ambitious - but deliverable - environmental goals include attaining 75 percent recyclin 2010, curbing San Francisco's greenhouse gas emissions to 20 percent below 1990 levels by 2012, and shutting do Hunters Point Power Plant by 2005.

SF Environment makes it easy for everyone in San Francisco to take care of their environment, and ultimately, th planet.

SFE Staff

- Jared Blumenfeld, Director
- David Assmann, Deputy Director
- Paul Horcher, Deputy Director

Environmental Justice

- Samuel Wright
- Hillary Amsberry
- Sraddha Mehta
- Anthony Oum
- Yvonne Webb

Toxic Materials Reduction

- Deborah O. Raphael
- Robin Breuer
- Nisha Chauhan
- Stephanie Davis
- Alex Dong

- Pearl Moy
- Deanna Simon
- Marjaneh Zarrehparvar

Recycling

- Robert Haley
- Julie Bryant
- Julia Chang
- Kevin Drew
- Alexa Kielty
- Jack Macy
- Miles Wagner

Climate Protection Division

- Julia Curtis

Clean Air Program
- Rick Ruvolo
- Clark Aganon
- Randa Gahin
- Sally Scott
- Ina Shlez

Green Building
- Mark Palmer
- Jan Stensland

Power Savers
- Peter O'Donnell
- Raymond Chu
- Carmen Nolasco
- Patricia Parra

Sustainable Energy
- Cal Broomhead
- Danielle Dowers
- Ann Kelly
- Hank Ryan

Public Outreach & Education

- Mark Westlund

Public Outreach
- Gloria Chan
- Jim Chien
- Lolita Sweet

School Education
- Jessica Chiachiaro
- Patrick Giambalvo
- Tamar Hurwitz
- Pauli Ojea
- Shana Solinsky
- Emily Utter
- Rebecca Wike

Urban Forestry

- Janet Michaelson

Environment Commission

- Emily Rogers

Administration

- Annie Cabatuan
- Ann Courtright
- Claudia Molina
- Bo-Ming Ng
- Carmen Omran
- Shawn Rosenmoss
- Ruth Santander
- Nelly Sun
- Rex Tabora

Climate Protection Program

Like a breath of fresh air, SF Environment's Climate Protection Program coordinates The City's efforts to reduce greenhouse gas emissions that cause global warming. The program seeks to reduce San Francisco's global warmin emissions by 20 percent below 1990 levels by 2012 by promoting efficiency efforts in energy use and transportati promoting methods of energy generation and transportation that use renewable power, and by improving the environmental performance of City buildings in the course of their design, construction, and use.

Energy Reliability

Unless there are significant new sources of electricity generation operating within City limits over the next three years, San Francisco may experience a debilitating energy shortfall that might be avoided only by keeping old, outmoded Hunters Point Power Plant in operation indefinitely.

To address these concerns SF Environment and San Francisco's Public Utilities Commission together created an Electricity Resource Plan, the first comprehensive plan of its kind in the state. It identifies ways to avoid energy shortfalls through energy efficiency, cleaner generation, and imported power. It also provides a framework for sl San Francisco's dependence on fossil-fuel burning power plants to clean, renewable forms of energy.

In addition to non-polluting solar and wind-generated power, SF Environment also advocates research into tidal electricity generation. If harnessed properly, the ocean currents under the Golden Gate Bridge could generate er power to meet all of San Francisco's energy needs.

Power Savers lights the way!

SF Environment's Power Savers program, which delivers energy efficiency retrofits to The City's small businesses, very successful year. The 18-month program, funded by a grant from the California Public Utilities Commission, provided energy audits at 4,000 small businesses, installed 2,500 new high efficiency lighting systems, and reduc consumption by 3.5 megawatts. This saved enough electricity to power more than 26,000 households a year, and the 15 million tons of carbon dioxide out of the atmosphere that a fossil fuel-burning power plant would generat create this amount of energy.

"Each watt that we save through conservation helps break our dependency on fossil fuel-burning power plants," commented SF Environment director Jared Blumenfeld, "When our small business community delivers such impre energy savings, it's a gift for human health and the environment."

When the program wraps up by the end of the current fiscal year, Power Savers will have completed 6,000 lightir surveys, upgraded 4,000 small businesses, and saved 6 megawatts of power. Power Savers is the first municipal program to win the Environmental Protection Agency's Energy Star Award.

Green Buildings

Resource-efficient buildings - also called "green" buildings - are designed and operated in an energy-efficient and environmentally friendly manner. SF Environment's Climate Protection Program is responsible for implementing t City's Green Building Ordinance. We also created the Green Building Design Toolkit, a compendium of building de software, web resources, and green building databases to be used by design professionals.

SF Environment offers trainings for city architects in green building practices, building materials, and LEED certification. LEED is the green building rating system of the US Green Building Council; the acronym stands for "Leadership in Energy and Environmental Design." LEED criteria evaluate a building's environmental and energy efficiency performance from a "whole building" perspective, over the course of a building's lifecycle, which provi definitive standard for what constitutes a green building.

SF Environment also helped develop a green building compliance guide for San Francisco municipal buildings, wh combines LEED-approved techniques along with City and State of California environmental requirements.

The Department developed legislation, now before the Board of Supervisors, that will establish LEED Silver as the standard for all future City projects and leaseholds over 5,000 square feet in size. The ordinance will require cer levels of environmental performances in sustainable sites and landscaping, energy efficiency, water conservation green building materials, and indoor air quality. It will also make it mandatoryfor at least one member of the de team (architects, engineers, owners, contractors, estimators materials, consultants, interior designers, or indoor quality consultants) be an accredited LEED professional. This could save the City and taxpayers millions of dollar energy costs, and improve worker efficiency.

Clearing the Air!

The Climate Protection Program works to reduce automobile emissions by promoting trip reduction, transit incen and environmentally friendly vehicles. SF Environment implements the Healthy Air and Smog Prevention Ordinan which requires all new vehicles the City purchases to be powered by low or zero-emission engines.

SF Environment acquired 100 new neighborhood electric vehicles from Ford and Daimler Chrysler for the City flee also worked with the Bay Area Air Quality Management District to improve regional electric vehicle infrastructure developing new and upgrading existing charging stations at SF International Airport, Stanford University, and in Sonoma County. The Department built fueling stations in Golden Gate Park and at outlying city fleet sites includi City's Water Treatment Plant in Millbrae. Future plans include supporting a full compliment of alternative fuel technologies, including hydrogen fuel cells.

Recycling Program

The "city that knows how" made recycling history this year. Under State mandate, all cities must divert 50 percer waste away from landfills. The City not only met this mandate, we surpassed it! San Franciscans are now recyclir more than they throw away!

San Francisco hit an historic 52 percent diversion rate and celebrated the achievement at Norcal Waste System ir new recycling sorting facility at Pier 96. This is a huge accomplishment for The City given its population density. figures reflect the 2001 calendar year, which showed San Francisco generated 1,620,260 tons of waste material. this, 780,622 tons went into landfill, while 839,638 tons were diverted through recycling, composting, reuse, anc efforts. This represents a significant increase over last year's 46 percent.

"In San Francisco, recycling is a important part of life," said Mayor Willie L. Brown, Jr. "We face many challenges density to steep hills, but we are fully committed to making our recycling programs work. When I started as Mayc 1996 San Francisco recycled only 35 percent of its waste. But today, on account of the hard work of businesses, residents, Norcal, and SF Environment, we celebrate a victory for the environment."

SF Environment and our partners at Norcal introduced several new recycling programs for San Francisco residents businesses.

One key to our recycling success is the "Fantastic Three" residential collection program, which has been rolled ou over 100,000 households. This successful program provides three carts for curbside recycling pickup of food and y scraps; paper, cans and bottles; and non-recyclable waste. The program will expand citywide.

San Francisco does not have the gracious lawns that help many California cities to capture tons of green waste. Instead, the City developed a food scrap compost program, now the most successful of any city in the country, w diverted nearly 60,000 tons of organic waste in 2001. In addition to homes in the Fantastic Three program, over businesses have signed on for organics collection as well.

Now that we have topped our 50 percent diversion goal, the City set the ambitious goal of recycling 75 percent o waste away from landfills by 2010 - and from there move on to zero waste.

"Surpassing the 50 percent mark is just the beginning for San Francisco," said SF Environment Director Jared Blumenfeld. "We recycle all types of plastic bottles, food scraps, computers, mattresses, and items that other ci throw away. Our ultimate goal is to build a San Francisco that has no waste going to the landfill. At the end of th day, recycling is a critical element to reducing our impact on the planet by saving trees, precious metals, water, energy, and landfill space."

Commercial Recycling Awards

For the third year, SF Environment and the Building Owners and Managers Association (BOMA) presented the Commercial Recycler of the Year Awards (CORYs) to businesses that achieved excellence in recycling.

This year, CORY winners pioneered various techniques to reduce waste, ranging from the drastic to the downrigh clever. The Palace Hotel, because of its old corridors and driveways, custom-designed a garbage can tipper to he maneuver compost to where it can be picked up. The California Culinary Academy has an aggressive recycling an composting program implemented in its curriculum, so up and coming chefs are trained to reuse, reduce, and re Scoma's Restaurant goes above and beyond by requesting all packaging come only in recyclable products. The San Francisco Zoo composts all of its animal fecal matter.

Other winners include Jardinere, Boulevard, Farallon, Acme Chop House, Sparky's Diner, Annabelle's bar and Bist Far East CafÈ, MacDonald's on Pine, Masala, Mescolanza, Moxarella di Bufala, Dolores Park CafÈ, ABC Bakery, Lov Kate's Kitchen, Royal Thai Restaurant, Walzwerk, Grupo de la Comida, Hilton Hotel, Arget Hotel, Fairmont Hotel Hopkins Hotel, Golden Gate University, UCSF, City College, and USF. The top recycling office buildings were 77 B Montgomery, 650 California, 1 Sansome, 275 Battery, 425 Market, 100 Pine Street, 150 Spear, 353 Sacramento, 1 2nd Street, 456 Montgomery, 255 Calfornia, 49 Stevenson, 425 California, and 900 North Point.

Toxics Reduction Program

SF Environment's Toxics Reduction Program works to improve the quality of human health and the environment i Francisco by providing information and services to San Francisco residents, businesses and City agencies to reduc use of toxic chemicals and properly manage hazardous waste. The program also administers a wide-range of haza waste collection services for spent or leftover household products including batteries, paint, pesticides, compute motor oil, and mercury thermometers.

SF Environment collected over 1 million pounds of hazardous waste from San Francisco residents and small busin of which 88 percent was recycled, recovered, or reused. The program served 647 businesses through the small bu drop-off program, and 12,000 residents through others special waste collection programs. Hundreds more used th various drop-off programs for batteries, used motor oil, latex paint, and needles. This was the first full year of th expanded battery collection program that now includes 45 Walgreen stores. Since the expansion, the volume of batteries collected and recycled has increase by more than 30 percent.

SF Environment and the University of California at San Francisco opened the City's first permanent Mercury Thermometer Exchange Program at the Millberry Union Bookstore on the school's campus. Residents can bring in old mercury containing thermometers and receive a free digital thermometer in exchange. So far, about 1,200 mercury thermometers have been removed from households, preventing about 600 grams of mercury from contaminating the environment. Six hundred grams is equivalent to over one billion gallons of water, enough to a the average person to take 20 million fifteen-minute showers. The department is expanding this program to prov

thermometer exchanges throughout the City, including a second location in Bayview Hunter's Point.

Getting Past Pests

SF Environment continues to take a bite out of toxic chemicals by lessening the use of pesticides. City Departmer made strides by implementing new techniques and less toxic products for controlling pests. Recreation and Park, San Francisco International Airport, and the Public Utilities Commission each employed goats to control poison oa other unwanted weeds. The staff at Laguna Honda Hospital went above and beyond by taking the time to pinpoir source of their pigeon problem and discovered patients were feeding the pigeons. Today, signs are posted to discourage the patients from feeding the birds. City staff also used many forms of biological approaches. One in particular was the use of beneficial insects to control other unwanted insects. Because of these initiatives, over percent of pest control applications were accomplished without the use of chemicals.

On behalf of all participating City agencies, SF Environment accepted and received the annual Integrated Pest Management (IPM) Innovator's Award from the California Department of Pesticide Regulation. This prestigious aw was given for the City's effort to use least toxic chemicals and for choosing alternative methods to control pests.

Educating the City

Keeping City staff abreast of the latest developments is a key element of San Francisco's IPM program. A wide va of training opportunities are made available through SF Environment as well as by individual departments.

- IPM Conference: More than 250 people attended the all day affair with people traveling from all througho California. Supervisor Matt Gonzalez was among the guest speaker who presented Environmental Service Awards. Others, included industry professional and experts.
- Technical Advisory Commictee: Representatives from City Departments convene each month to talk pests is an opportunity for people to exchange information, discuss current pest control techniques with IPM ex report on the progress of implementation, and participate in presentations. Training is also provided for specific pest needs such as rodent control, equipment use, and storage.
- The San Francisco Flower and Garden Show: The annual show provided SF Environment and the general pı the opportunity to ask questions and exchange information about safe and less toxic forms of gardening approaches.
- "Getting Past Pesticides: Integrated Pest Management San Francisco": SF Environment and the Public Utili Commission partnered up to create a brochure educating people about alternatives to chemicals ranging the thermal treatment of termite control to habitat restoration and about the IPM Program.

Protecting the city employees and the public

SF Environment this year completed a 3-year pilot Environmentally Preferable Purchasing Program. This program allowed the City to identify toxic chemicals that may pose harm to human health and the environment. The City' is to minimize the purchase and use of toxic chemical products used for janitorial building, and fleet maintenanc Out of sixteen environmentally preferred products, fourteen were selected and tested including various types of cleaners, contact cleaners, kitchen degreasers, penetrating lubricants, tile cleaners, carburetor cleaners, class cleaners, machinery degreasers, restroom cleaners, toilet bowl cleaners, coil cleaners, graffiti removers, metal cleaners and shop floor degreasers. The results were astounding! They showed that the products were not only ju effective but cost the same, or less.

The study also revealed that the application of these products could potentially minimize exposure to risky chem by as much as 98 percent in fleet maintenance products, 31 percent in building maintenance products, and 20 pe in janitorial products.

"SF Environment's programs are setting precedents that exemplify the importance of reducing potentially harmfu chemicals. Because of these efforts, everyone who works for the City, or visits our parks and open spaces, can re assure that we are taking the necessary steps to provide a healthy environment," adds SF Environment director J. Blumenfeld.

Environmental Justice Program

The City's Environmental Justice team works to enhance and improve the quality of life for residents who bear a disproportionate burden of environmental contamination. After the State of California appropriated $13 million t Francisco for community mitigation in the Bayview Hunters Point (BVHP) and Potrero Hill neighborhoods, SF Environment developed an annual Environmental Justice grant program to disburse the funds to these communiti

Over 75 residents of BVHP and Potrero were employed through the EJ grant program in 2002. Over half of these individuals received specialized training, varying from solar installation to horticulture. In addition, thousands of community residents were educated on energy efficiency and renewables, the clean-up status of the Hunters Poi Naval Shipyard, and health care.

2002 Environmental Justice Grants:

- Economic Opportunity Council of San Francisco: $75,000 to expand existing food pantry program at Potrer Family Resource Center and provide nutrition education.
- St. Gregory's Food Pantry: $39,500 to open two new food pantries in Bayview Hunters Point and Potrero H
- Girls 2000: $75,000 to expand after-school/ evening programs for girls in Bayview Hunters Point to includ nutrition education, maintenance and expansion of community gardens, and maintenance of a food pantr
- Residents Association of All Hallows Garden and Shoreview Environmental Justice Movement, Inc. (Partne $30,000 to improve indoor air quality and assist with environmental health impacts experienced by reside BVHP apartment complexes.
- Communities for a Better Environment: $30,000 to provide technical assistance to residents and communi based organizations in BVHP and Potrero on energy programs and resources in San Francisco.
- Kids in Parks: $17,686 to organize field trips and develop environmental lesson plans for children in BVHP
- Greenaction for Health and Environmental Justice: $50,000 to promote energy conservation and renewab energy through outreach and to mobilize the community to influence decisions around energy issues in Sa Francisco.

In an effort to institutionalize the concept of environmental justice, the EJ program has expanded beyond the disbursement of grants. The EJ program has conducted trainings for City employees, businesses, and other agenc assist them in considering EJ while conducting their work. These trainings include tours of EJ neighborhoods as w the identification of measures that could be taken by the groups to address EJ issues. If your organization is inter in receiving training on environmental justice, please contact the EJ Program at 415-355-3723.

Outreach Education

- **Greening Schools in San Francisco**

  SF Environment's School Education Program offers free environmental education services to San Francisco public and private schools. These services include classroom presentations and school assemblies, teache workshops, peer education, informational field trips, and technical assistance for establishing school-wid recycling programs.

- **Organics Collection in Schools**

  Students across the City are making the grade when it comes to recycling and composting. In addition to implementing successful paper and beverage container recycling programs, many San Francisco schools h started collecting organic material for composting. Approximately fifty schools have started organics coll in their lunchrooms, effectively diverting an additional 38 percent of their school's waste from the Altamc Landfill.

  SF Environment has played a pivotal role in assisting schools with implementing organics collection progra

Our Education Staff has guided teachers and administrators through the planning process, led students in of their lunchroom garbage, performed classroom presentations and assemblies, and trained students to monitor and maintain their organics collection programs.

- Rewarding the Recyclers

In May, the Education Program hosted a gala award ceremony, celebrating and honoring students and tea for their commitment in creating highly successful recycling, composting and gardening programs on their school campuses. One of the honorees was San Francisco Community School.

SF Community School did something truly extraordinary. Soon after they began their organics collection program, the school turned their front parking lot into a garden. With a grant provided by SF Environment the California Integrated Waste Management Board, several yards of nutrient-rich compost were purchase and now SF Community grows vegetables with compost made from the organics collection program. More importantly, the vegetables grown during the winter months are harvested and used in the after-school c program. Four times a week, the cooking program incorporates into their meals vegetables grown in the such as lettuce, kale, broccoli, beets and carrots. The food scraps created while preparing these meals c then be thrown into the compost collection bin, and the cycle begins again. SF Community is truly closing composting loop.

The School Education Program continues to gain momentum with the help of Sunset Scavenger as they ha helped more than 50 schools launch a recycling/compost program.

The Commission on the Environment

The mission of the Commission on the Environment is to improve, enhance, and preserve the environment, and t promote San Francisco's long-term environmental wellbeing.

Membership:

- The Honorable Parin Shah, President
- The Honorable Randall Hayes, Vice President and Hydrogen City Sub-Committee Chair
- The Honorable Arlene Rodriquez, Finance and Operations
- The Honorable Johanna Wald, Planning and Policy Sub-Committee Chair
- The Honorable Rev. Sally Bingham
- The Honorable Nia Crowder
- The Honorable Alan Mok

Special thanks to the following former commissioners for their dedicated service to the enviornment:

- The Honorable Rebecca Evans
- The Honorable Shelly Bradford-Bell
- The Honorable Robert Werbe

The Commission meets on the first Thursday of every other month (January, March, May, July, September, Nover For information regarding Commission meetings please call the Commission Secretary, Emily Rogers at 415-355-3 check the Commission website at www.sfenvironment.com. The Commission welcomes and encourages the publi participation at its meetings.

Commission on the Environment Resolutions 2002

The Commission on the Environment sets policy for the Department of the Environment, and advises the Mayor a Board of Supervisors on environmental matters, usually in the form of resolutions and legislation. Over the past y many of the resolutions passed by the Commission were eventually heard before the Board of Supervisors and the State Legislature. The following is a list of resolutions passed during the year 2002 along with a brief update of e

Resolution No. 001-02-COE
Ocean Beach

January 15, 2002

Urging the Mayor and Board of Supervisors of the City and County of San Francisco to address the challenges of O Beach concerning erosion, natural resources, recreation, recycling and aesthetic issues.

- A collaborative of local businesses, residents and local agencies was formed to address the issues at Ocea Beach. The group is called the Ocean Beach Task Force.

Resolution No. 003-02-COE
Solar Revenue Bond
March 19, 2002

Urging the City and County of San Francisco's Public Utility Commission to immediately implement The Solar Reve Bond for San Francisco's public facilities.

Resolution No. 005-02-COE
Clopyralid and Other Pesticides that are Persistent in Compost
March 19, 2002

Urging the Mayor and the Board of Supervisors of the City and County of San Francisco: to explicitly ban the use c clopyralid (and any other pesticides that are persistent in compost) by city departments; to write to state and fe agencies and state legislators to ban the use of clopyralid (and any other pesticides that are persistent in compos and to require manufacturer compensation of compost producers and compost product users for damages suffere to the use of clopyralid or other persistent pesticide contaminated compost.

- Supervisor Peskin sponsored this legislation.

Resolution No. 007-02 COE
Zero Waste Goal
April 16, 2002

Urging the Mayor and the Board of Supervisors of the City and County of San Francisco to adopt a goal of 75% lan diversion by the year 2010, to adopt a goal of zero waste by 2020, to support Senate Bill 1526 to set similar goals California and to require disclosure on the use of green and recyclable material as landfill cover or as waste in la

- Supervisor Ammiano sponsored this legislation.

Resolution No. 008-02-COE
Alternative Fuels Bus Program
May 21, 2002

Urging the San Francisco Municipal Railway to take immediate action on the purchase of alternative fuel buses ar purchase any new diesel buses.

- Supervisor Peskin sponsored this legislation.

Resolution No. 009-02-COE
Green Building Project - Golden Gate Concourse Underground Parking Facility
July 16, 2002

Recognizing the California Integrated Waste Management Board as the grantor to the Department of the Environr for a Green Building Pilot Project at the Golden Gate Concourse Underground Parking Facility and designating the Department's director as having signature authority.

Resolution No. 010-02-COE
Supporting SB 2065
July 16, 2002

Urging the Mayor and the Board of Supervisors of the City and County of San Francisco to urge Governor Davis an California Legislature to make SB 2065, California's Low Level Radioactive Waste Reporting Requirement, into lav

Goals and Objectives for the Coming Year

The Commission has developed a strategic plan that outlines goals, objectives and actions for the coming year. T goals for the coming year are prioritized into three main categories Legislative, Policy, and Internal as follows:

Legislative

- Goal: Consolidate San Francisco's Environmental Legislation into one section called the environment code

Policy

- Goal: Draft an outline plan for transforming San Francisco into a city powered by renewable energy with a special focus on the role of hydrogen for replacing gasoline and diesel.
- Goal: Begin developing an implementation plan for attaining Zero Waste by 2020.

Internal

- Goal: Actively identify salient environmental issues.

SF Environment • 415-355-3700 • environment@sfgov.org • 11 Grove Street, San Francisco, CA 94102

Annual Report 2003

OUR HOME
OUR CITY
OUR PLANET

SFE Mission Statement

SFE Staff

Jared Blumenfeld
Director

David Assmann
Deputy Director

Environmental Justice
Anne Eng

Hillary Amsberry
Anne Lee
Sraddha Mehta
Anthony Oum

Toxic Materials Reduction
Deborah O. Raphael

Kristin Burford
Nisha Chauhan
Sushma Dhulipala
Alex Dong
Chris Geiger
Deanna Simon
Marjaneh Zarrehparvar

Recycling
Robert Haley

Julia Chang
Alex Dmitriew
Kevin Drew
Alexa Kielty

Jack Macy
Gabrielle White
Emily Utter

Clean Air Program

Rick Ruvolo
Clark Aganon
Randa Gahin
Sally Scott
Ina Shlez

Green Building

Richard Chien
Laura Ingalls
Cheryl Lee
Mark Palmer

Energy
Cal Broomhead

Renewable Energy
Peter O'Donnell

Peak Energy Program
Alena Gilchrist
Ann Kelly
Raymond Manion
Renee Fernandez
Yvonne Webb

Public Outreach & Education
Mark Westlund

Public Outreach
Gloria Chan
Jim Chien
Lolita Sweet

School Education
Jessica Chiachiaro

Miriam Feiner
Tamar Hurwitz
Pauli Ojea
Annette Poliwka
Jordan Shechter
Rebecca Wike

Urban Forestry
Alexis Harte

Commission on the Environment
Emily Rogers

Administration
Ami Biligiri
Ann Courtright
Claudia Molina
Mary Nelson
Bo-Ming Ng
Carmen Omran
Shawn Rosenmoss
Ruth Santander
Joseph Salem
Nelly Sun

San Francisco Peak Energy Program powers up to shut down power plant!!

SF Environment and Pacific Gas & Electric (PG&E) joined forces to create an energy efficiency project for residents and businesses. The San Francisco Peak Energy Program (SFPEP) is funded though the California Public Utilities Commission and is an effort to reduce enough energy to help shut down the Hunters Point Power Plant and reduce any potential energy shortfalls that might come about during peak energy demand. In order to do so, the collaboration offers residents and businesses a variety of energy efficiency measures to reduce energy by 16 megawatts during vital summer and winter months.

"Each watt that we save through conservation helps break our dependency on fossil fuel-burning power plants," commented SF Environment director Jared Blumenfeld. "When our small business community delivers such impressive energy savings, it's a gift for human health and the environment."

SFPEP has focused its resources on the commercial sector and on residential units in Bayview/Hunters Point. Through PG&E's infrastructure, the program offers cash incentives to customers who upgrade to energy efficient appliances and lighting. In addition, SF Environment

continues to provide technical services to small and medium sized buildings, develop new energy efficiency legislation, work with the Bayview Hunters Point community to test and distribute new efficiency technologies, and doing extensive marketing and outreach. This effort is one of several strategies to shift San Francisco's dependence on fossil-fuel burning power plants to clean and renewable forms of energy.

SF Environment is also working on renewable measures in the form of solar energy. In collaboration with the Department of Building Inspection, we are developing a fast-track permitting process for the Generation Solar program. The program's immediate goal is to install one hundred solar panels on residential and commercial property. The long-term goal of the program is to assist with planning, permitting, designs, installations, quality control and inspection for what may grow to be 10,000 solar installations over the next decade.

SF Environment is also working to develop the next generation of renewable resources including that from the ocean tides. This project proposes to use the ocean waves under the Golden Gate Bridge to power thousands of homes on land. While this project might take years to complete, it was designed to afford the City new options toward meeting its goal of 100% renewable energy generation in the decades ahead.

Green Buildings

Green Buildings are designed, constructed, renovated, operated, and reused to benefit the City financially, enhance the environment, and provide healthy, productive places for citizens to live, work, and visit. SF Environment's Green Building Program is responsible for implementing the City's Green Building Ordinance including training for City design professionals, developing Green Building Pilot Projects, and establishing standards for high performance City buildings.

SF Environment prepared a green building ordinance to establish LEED Silver as a standard for all new City construction projects, which was adopted in June 2004. The LEED (Leadership in Energy and Environmental Design) Green Building Rating System™, developed by the US Green Building Council is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. LEED provides a complete framework for assessing building performance and meeting sustainability goals. The buildings are rated on a four-step scale from lowest to highest: LEED Certified, LEED Silver, LEED Gold, and LEED Platinum. The LEED certification analyzes several categories including the facility's energy and water efficiency, landscaping, proximity to public transportation, renewable energy, effort in using recycled materials and use of less toxic products, innovation and design.

San Francisco completed two Green Building Pilot Projects: SF Recreation and Park clubhouses at Visitacion Valley, and Parque Niños Unidos in the Mission District. The facilities capture natural daylight and ventilation, and emphasize natural and reclaimed materials.

Laguna Honda Hospital is another pilot project in the making. The renovation is projected to exceed energy code requirements by 30% through the use of energy efficient building design,

natural daylighting and ventilation. This facility will save the City over $7 million during the first ten years of hospital operation. This project is in initial stages of construction and is slated for completion in 2007.

The California Academy of Sciences in Golden Gate Park is striving for the highest levels of environmental performance. California Academy of Sciences, among the ten largest natural history museums and research centers in the world, is rebuilding at its location in Golden Gate Park. The museum is registered with the US Green Building Council and is projected for the highest rating. It will highlight a living roof of native and adapted species that will blend the building into its park setting, reduce heating and cooling requirements, create oxygen for the planet and habitat for wildlife, and reduce storm water run-off, which will lessen the burden on the city's wastewater treatment plants. Floor to ceiling glass walls will suffuse public spaces with natural light and integrate the interior space with the environment of the park. Solar panels will also provide clean, renewable energy for the Academy. The Academy will be under construction through 2007.

The Plaza Apartments, 106 units of transitional/affordable housing is being developed by the SF Redevelopment Agency with green building assistance from the Department of Environment. This project emphasizes natural lighting and ventilation, solar electricity, less toxic materials and sustainably harvested wood. The project is registered with the US Green Building Council for a LEED Silver rating. The Plaza Apartments will be under construction through 2005.

Clearing the Air!

SF Environment's Clean Air Program (CAP) works to reduce automobile emissions by promoting trip reduction, transit incentives, environmentally friendly vehicles, and implementing the Healthy Air and Smog Prevention Ordinance.

CAP pushed the petal to the metal by leasing two new hydrogen fuel cell vehicles and purposing to build a hydrogen fueling station. These two new additions are being used as research to improve technology for consumer use. The Healthy Air and Smog Prevention ordinance guides the City in terms of purchasing the cleanest, most fuel-efficient vehicles. At the end of 2003, the City had over six hundred alternative fuel vehicles in its fleets.

In recognition of its extraordinary accomplishments in the field of alternative fuel vehicles, San Francisco was selected as a host city for the 2003 Challenge Bibendum. CAP staff worked to support this huge event, with over four hundred international journalists from twenty-nine countries visiting San Francisco to learn more about our municipal efforts to reduce emissions and promote the use of alternatives to petroleum-based fuels.

CAP staff also worked on greening Norcal's refuse and recycling collection fleet. Fourteen transfer trucks were converted to liquefied natural gas. Additionally, the Clean Air Taxi project resulted in more than one hundred compressed natural gas (CNG) taxis operating more than one million CNG miles per month in San Francisco.

SFE also worked with MUNI to create a 2020 Clean Air Plan for the purchase of cleaner transit buses for the City. The plan includes the purchase of hybrid diesel-electric buses in the near term and potentially purchase hydrogen fuel cell buses when they become commercially available in the next ten to fifteen years.

SF Environment was awarded Bay Area's Best Workplace for Commuters by the U.S. Environmental Protection Agency for our initiatives to help City staff use alternate means of transportation. The Commuter Benefit Program provides tax incentives for those who participate in public transit. In 2003, around 4,300 employees received monthly transit passes. During daily peak hours, SF Environment provided hundreds of employees with shuttle services to and from central locations.

We also encouraged bicycle participation among City staff by replacing motorized vehicles with more than 200 bicycles for police officers and providing 40 more bicycles and 20 utility trailers to gardeners. We also offered safety-training courses in collaboration with partnering agencies and organizations.

Zero Waste Program

The City's recycling program provides services to residents, businesses, and department agencies. Again, San Francisco made history by showing even better recycling numbers.

San Francisco's landfill diversion rate increased dramatically from 52% to 63%. This rate is among the highest for a large U.S. city. While recycling improved in many areas, the majority of the increase is attributed to aggressive reuse and recycling of construction and demolition debris.

"Recycling is tied directly to the economy, so the more construction we have going on the more tonnage we can expect to recycle," says SF Environment Director Jared Blumenfeld. "If construction goes down we may see a drop in our recycling numbers next year, but the important thing is to keep our core recycling and composting programs moving in the right direction, as well as capture everything available in the construction realm."

The figures reflect the 2002 calendar year, which showed San Francisco generated 1,882,490 tons of solid waste. Of this 702,012 tons went to landfill while 1,180,478 tons were diverted through waste prevention, recycling, composting and other efforts. This is lowest landfill tonnage for San Francisco since 1995.

One key to the City's recycling success is the "Fantastic Three" residential and small business collection program, which completed rolling out to an additional 50,000 households. This successful program provides carts for composting food scraps and yard trimmings; recycling paper, bottles and cans. San Francisco worked with Norcal Waste Systems to expand the recycling programs accept #2, 4 and 5 plastic tubs and lids used for many dairy products such as yogurt cups.

San Francisco's food scrap composting program, the largest in the country, now recovers over 75,000 tons of organic material. In addition to homes, an estimated 2,000 businesses are participating in the compost program. Many restaurants are now diverting over 90% of their discards including Anchor Brewing Co. with a close to zero diversion rate at 99%!

SF Environment is assisting City departments to lead by example with respect to environmental practices. SF Environment worked with city departments and was able to triple the number of Recycling Coordinators doubled Resource Conservation Ordinance compliance. Three of the top four recycling generators in San Francisco are City agencies or facilities: the Recreation and Park Department, the Department of Public Works, and the de Young Museum. San Francisco's Fire Department became the first in the nation to compost food scraps at its stations.

The Commission on the Environment succeeded in urging the Board of Supervisors to adopt a resolution calling on City departments to compost more and use compostable food containers. SF Environment also assisted in the passing and implementation of California's pioneering electronics recycling law. The San Francisco Commission on the Environment and Board of Supervisors, building on the goal they adopted last year of 75% diversion by 2010, set the ambitious date of 2020 to achieve zero waste. "San Francisco's commitment to recycling is truly remarkable," said Mayor Gavin Newsom, "and thanks to the hard work of businesses, residents, Norcal, and our Environment Department, we can celebrate a victory for the environment." However, the Mayor enjoined, "if we are going to maintain these numbers and make our goal of 75 percent by 2010, we'll need to support mandatory recycling as well as hold manufacturers accountable for the environmental impacts of their products and packaging."

Now that we have topped our 50 percent diversion goal, the City set the ambitious goal of recycling 75 percent of waste away from landfills by 2010 – and from there move on to zero waste.

"Surpassing the 50 percent mark is just the beginning for San Francisco," said SF Environment Director Jared Blumenfeld. "We recycle all types of plastic bottles, food scraps, computers, mattresses, and items that other cities throw away. Our ultimate goal is to build a San Francisco that has no waste going to the landfill. At the end of the day, recycling is a critical element to reducing our impact on the planet by saving trees, precious metals, water, energy, and landfill space."

SF Environment and the Building Owners and Managers Association (BOMA) teamed up for the fourth year to present the Commercial Recycler of the Year Awards (CORYs). This year, twenty-nine businesses and seventeen honorable mentions were awarded various amounts of monetary recognition for their efforts in going above and beyond in recycling and composting.

Toxics Reduction

SF Environment's Toxics Reduction Program works to improve the quality of human health and the environment in San Francisco by providing information and services to San Francisco residents, businesses and City agencies to reduce the use of toxic chemicals and properly manage toxic waste. The program also administers a wide-range of toxic waste collection services for

spent or leftover household products including batteries, paint, pesticides, computers, motor oil, mercury thermometers and fluorescent lights.

Helping San Francisco Residents

SF Environment collected over 1 million pounds of toxic waste from San Francisco residents in— more than 85% of which was recycled, recovered, or reused. SFE's Household Hazardous Waste Facility (HHWF) and home collection programs served more than 12,000 residents. Thousands more properly disposed of toxic waste through a variety of other special collection programs including convenient drop-off locations throughout San Francisco for household-type batteries, used motor oil and oil filters, latex paint, used needles and mercury thermometers.

Focus on Underserved Communities – Housing Authority Pilot Program

SF Environment learned in that the San Francisco Housing Authority (SFHA) severely lacked the resources necessary to provide toxic waste disposal opportunities and toxics reduction education to their tenants. Due to a complicated garbage rate structure, SF Environment did not have the funding to assist this sector of the City in the past, but through a partnership with the SFHA and Young Community Developers, a non-profit organization based in the Bayview/Hunter's Point Area, we held our first public housing focused educational and toxics waste collection event. While the waste collection volumes were lower than anticipated, the event brought us face to face with more than 500 tenants of public housing, to provide information important to their community on proper disposal of toxic waste and information on less-toxic pest management.

Focus on Mercury

Mercury Thermometers: The pilot Mercury Thermometer Exchange Program was in full force. This program provided more than 5,000 residents an opportunity to exchange mercury-containing thermometers for free digital thermometers, a partnership with the University of California, San Francisco (UCSF). The initial program kicked off at the USCF Millberry Union Bookstore on campus and soon two additional exchange sites were added; the SF Environment ECO Center located in the Civic Center area and the Household Hazardous Waste facility located in Visitation Valley.

Fluorescent Lights: SF Environment received a $70,000 grant from the California Integrated Waste Management Board to set-up convenient disposal options of fluorescent light for San Francisco residents. Fluorescent lights, while far more energy efficient than incandescent lights, contain mercury and should not be disposed of in regular household trash. The program was designed and established to include 15 convenient collection sites throughout San Francisco. These sites include hardware and lighting retail shops.

Getting Past Pests

SF Environment's extensive Integrated Pest Management Program (IPM) has continued its role as a leader in reducing the unnecessary use of toxic pesticides. The use of all pesticides throughout the city property has declined by 67% since the program began in 1996, and the use

of highest toxicity pesticide products has declined by 70%-87% since 1999. Working with SFE, other City departments have steadily improved their pest management programs by experimenting with innovative, reduced-risk methods. For example, the Public Utilities Commission experimented with using goats for vegetation management along its rights-of-way, the Port began mulching its landscape areas to reduce herbicide use, and the Department of Recreation and Parks continued experimenting with the use of compost tea to lower fungicide use on golf courses. A major golf course renovation was also completed at Harding Park, which involved the use of Roundup herbicide; SF Environment staff became involved to safeguard water quality at nearby Lake Merced, and to help insure that the renovation would fulfill its promise of reducing the future need for harsher broadleaf herbicides.

The City's Reduced Risk Pesticide List was further refined through a public process that included input from both City staff and the public. Thirteen pesticide products were removed from the list, including four products in the most hazardous category. Ten new products were added, none of which are in the most hazardous category.

Educating the City

An important element of the IPM Program is to keep City staff abreast with current developments. SF Environment as well as partnering agencies provided assistance and a wide variety of training workshops in regards to these issues.

IPM Conference: More than 250 people from all over California attended this annual, all-day affair. San Francisco Board of Supervisors President Matt Gonzalez presented several City departments and individual staff members with the Environmental Service Awards in recognition for their efforts to reduce the use of pesticides on City property.

Technical Advisory Committee: Pest management coordinators from seven City departments gather each month to compare notes and hear about new techniques. Special features included a tour of the Jepson Prairie Organics Composting facility, talks on ant management, repellent trash bags, and native species issues, plus a demonstration of a weed steamer device.

Mosquitoes and West Nile Virus: SFE organized two full days of training in train City workers about the disease, its transmission, and effective control using mechanical and chemical methods.

IPM trainings: SF Environment organized four pesticide application safety/IPM trainings, and two trainings in the use of weed flamers as alternatives to herbicides. A total of approximately 300 City staff attended the trainings.

The San Francisco Flower and Garden Show: The annual show provided SF Environment and the general public the opportunity to ask questions and exchange information about safe and less toxic forms of gardening approaches.

SF Environment completed a 3-year pilot Environmentally Preferable Purchasing Program (EP3). This program allowed the City to identify toxic chemicals that may pose harm to human health and the environment. The City's goal is to minimize the purchase and use of toxic chemical products used for janitorial building, and fleet maintenance. Out of sixteen environmentally preferred products, fourteen were selected and tested including various types of brake cleaners, contact cleaners, kitchen degreasers, penetrating lubricants, tile cleaners, carburetor cleaners, class cleaners, machinery degreasers, restroom cleaners, toilet bowl cleaners, coil cleaners, graffiti removers, metal cleaners and shop floor degreasers. The results were astounding! They showed that the products were not only just as effective but cost the same, or less.

The study also revealed that the application of these products could potentially minimize exposure to risky chemicals by as much as 98 percent in fleet maintenance products, 31 percent in building maintenance products, and 20 percent in janitorial products. SF Environment is currently working with City purchasing staff to incorporate environmentally preferable purchasing into upcoming contracts for janitorial cleaners, office papers, and light bulbs.

"SF Environment's programs are setting precedents that exemplify the importance of reducing potentially harmful chemicals. Because of these efforts, everyone who works for the City, or visits our parks and open spaces, can rest assure that we are taking the necessary steps to provide a healthy environment," adds SF Environment director Jared Blumenfeld.

San Francisco's Arsenic-Treated Wood Ordinance

The San Francisco Board of Supervisors adopted the Arsenic Treated Wood Ordinance. The ordinance directs city agencies to purchase alternatives to this type of wood. Preservative treated wood that contains arsenic is a known human carcinogen and may potentially pose a threat to the health of children that play wooden playground and park equipment treated with this type of chemical. In addition, Preservative-treated wood containing arsenic may also pose potential human health and environmental risks through the release of arsenic during manufacture, installation, and disposal of wood.

City staff worked closely with environmental scientists and product manufacturers to develop a list of alternative preservative products. The ordinance directed city departments to develop a sealing and replacement schedule for play structures and other equipment made from arsenic treated wood. SF Environment, in collaboration with environmental scientists developed criteria for choosing the most effective sealants to use and will coordinate with other City departments to develop a sealing protocol for these park play structures.

Helping Businesses

SF Environment assists San Francisco businesses with proper management and disposal of their hazardous waste, while providing businesses ways to reduce their hazardous waste and resources on less toxic alternatives.

In collaboration with the Public Utilities Commission, the **Dental Mercury Reduction Program** was launched to reduce the amount of mercury emitted from San Francisco dental offices into the Bay. SF Environment also received a generous grant from EPA Region 9 to pilot the dental mercury program in the region. A wide variety of resources, events and training activities were undertaken to encourage dentists to install amalgam[1] removal equipment and to train them on proper management and disposal of amalgam and other hazardous wastes generated. They include:

Amalgam Separator Vendor Expo: SFE hosted a Vendor Expo where manufacturers of amalgam separators displayed their equipment and hazardous waste treatment companies provided service information. The highly successful Expo was attended by over 300 dental practitioners in San Francisco and also attracted representatives from neighboring jurisdictions.

SF Approved Amalgam Separators: SFE created a database of amalgam separators approved by San Francisco, with relevant equipment data and cost information against each listed unit. This was undertaken in an effort to help dentists make informed choices while saving time. The City of Palo Alto now uses San Francisco's list in it's own mercury reduction program.

Amalgam Separator Rebate Program: In order to encourage dentists to install separators, SF Environment offered rebates of $200 each to the first 100 dental offices installing separators. This "early responder" program was very popular and widely successful. The $20,000 in rebates was awarded within 2 months of the rebate announcement, and over two hundred applications were received in total (with more applications still coming in).

In 2003, SF Environment worked with San Francisco Department of Public Health to design and develop a **San Francisco Green Business Program** to recognize businesses that operate in an environmentally responsible way in the areas of energy conservation, water conservation, solid waste management and pollution prevention. Launched in the beginning of 2004, this program is a very successful inter-departmental collaborative effort. Currently, the program assists over 40 enrolled businesses with environmental compliance and resource conservation efforts.

In 2003, SF Environment assisted more than 650 small businesses to properly dispose of their toxic waste through the City sponsored small business drop-off and collection programs. These programs collected over 100,000 pounds of toxic waste, more than 85% of which was recycled, recovered, or reused.

EJ Program

2003 Environmental Justice Program

The City's Environmental Justice (EJ) Program works to enhance and improve the quality of life for residents who bear a disproportionate burden of environmental contamination; specifically in

the Bayview Hunters Point and Potrero Hill neighborhoods where two power plants and a Naval Shipyard, listed as a superfund site, is located. After the State of California appropriated $13 million to San Francisco for community mitigation in the Bayview Hunters Point (BVHP) and Potrero Hill neighborhoods, SF Environment developed an environmental justice grant program to disburse the funds to these communities. In addition, the EJ Program has launched new initiatives to assist these communities to address environmental justice issues.

Grant program highlights from 2003 include:

Approximately 300 families in Bayview Hunters Point and Potrero Hill received free food, including fresh produce, every week, amounting to over 250,000 pounds of food distributed during the year.
15 youth and over 50 adults learned about nutrition and healthy cooking.
Approximately 70 youth went on field-trips in San Francisco to learn about environmental justice and our urban environment.
Hundreds of residents organized to influence environmental decisions around energy issues in the City.
An energy cooperative was formed to provide hundreds of residents and businesses with free or low-cost energy-efficient appliances, job training in the energy field, energy audits, and other energy-saving measures.
A new information center and walking tour on the history and clean-up of the Hunters Point Shipyard opened for public use.
Bayview Hunters Point Multipurpose Senior Services was awarded $30,000 to inform seniors from BVHP about asthma and other Chronic Obstructive Pulmonary Diseases (COPD) and conduct free physical and written COPD screenings for five hundred seniors.

New EJ initiatives launched in 2003:

The EJ Program offered strategic planning and project management workshops to increase the capacity of our grantees to develop and implement projects and programs to address environmental justice.
SF Environment, in partnership with Literacy for Environmental Justice, the California Air Resources Board (CARB), and the Bay Area Air Quality Management District (BAAQMD), launched the Bayview Hunters Point Community Air Monitoring Project (BayCAMP) at the corner of Progress Street and Whitney Young Circle in Bayview Hunters Point. The air monitor will collect air quality data over a 12-month period to better understand the "regional" air quality conditions in the Southeast area of the City.
The EJ Program secured funding for starting a farmers' market in Bayview Hunters Point to help residents obtain affordable, fresh produce and healthy, prepared foods. The farmers' market will be launched in April of 2005.

Environmental Education

SF Environment's School Education Program provides K-12 students with free, standards-based environmental education programs that motivate students to protect the environment by composting, recycling and protecting our water. From innovative lunchroom composting programs to classroom presentations on water pollution prevention, to hands-on gardening activities, field trips, and California state standards-based lesson plans, SF Environment's School Education Program successfully educates over 15,000 students a year in a select variety of environmental topics relevant to the health of our home, our city and our planet.

Food to Flowers! Lunchroom Composting Program

In 2003, SF Environment launched *Food to Flowers!*, a new and improved lunchroom composting program—featuring a 7 ft. tall mascot *Phoebe the Phoenix*—that teaches students about the interconnectedness of nature and how recycling and composting help protect the environment. *Food to Flowers!* uses dynamic slide show assemblies starring *Phoebe the Phoenix*, to teach about habitat preservation, resource conservation, global warming, alternative energy, recycling, composting, and environmental justice. Students delighted by *Phoebe the Phoenix* are eager to learn from her how to compost their school lunches using the City's green cart program. In addition to providing assemblies, our Education Staff guided teachers and administrators through the planning process, led students in audits of their lunchroom garbage, and trained students to monitor and maintain their composting programs

In total, SF Environment worked with twenty-one schools to implement or improve their *Food to Flowers!* programs and educated 400 teachers and 7,600 students about how composting helps schools reduce waste, conserve resources, and create healthy topsoil. Approximately fifty-six schools have started lunchroom composting programs— diverting approximately 500 tons of organic matter from the Altamont Landfill.

Planting for the future

SF Environment collaborated with the San Francisco Unified School District Director of Educational Gardens and Landscape Department, the Haight Ashbury Neighborhood Council Compost Education Program (HANC), and CoEvolution to build school gardens at Malcolm X Academy in San Francisco's Bayview-Hunters Point neighborhood and Miraloma Elementary in Miraloma Park.

SF Environment is proud to say that San Francisco is making history by being the first city in the nation to compost school leftovers and incorporate that compost into school gardens!

Urban Forest Council

In response to the need for stewardship regarding trees in San Francisco, the Board of Supervisors passed the Urban Forest Council Ordinance. The ordinance calls for the creation of a 15 member Urban Forest Council that will provide the Mayor and Board of Supervisors with information to help promote a healthy and sustainable urban forest. This includes information on

street tree structure, street tree function and value, current management structure and overall plan to improve the urban forest.

There are an estimated 98,534 street trees in San Francisco, providing $7.5 million in total annual benefits to the community. While San Francisco is on par with the statewide street tree average, there are many opportunities to increase the resource extent.

With approximately 127,500 tree-planting sites available, the City remains 56% unplanted. Of these sites, affluent neighborhoods had an average rate of 28% empty sites, while underserved neighborhoods typically see empty rates of up to 74 %. This inconsistent distribution of the urban forest is an important environmental justice issue; specifically, the street tree population appears to be least established in districts 10 and 11.

Of the organizations that participated in the research for this report, most stated their number one challenge lack of consistent funding. For example, San Francisco's street tree program receives no funding through property taxes or any other consistent general fund source.

In the near future, the Urban Forest Council will be developing an Urban Forest Management Plan that builds on information in this report. The Urban Forest Plan will be the standard reference document that defines policies and procedures for urban forestry management in San Francisco. The Plan will serve many users: city departments, non-profits and other entities that manage San Francisco's trees, as well as the general public.

Annual Report 2004-2005

From The Director: Jared Blumenfeld

The City has been at the vanguard of the environmental movement for generations, and nowhere else on earth will you find a more environmentally aware and active public, than the folks who live and breath San Francisco. The Department of the Environment is at the forefront in coordinating efforts to reduce greenhouse emissions that cause global warming, in providing assistance to ensure environmental equality to neighborhoods where its needed most, and in attaining a 75% recycling rate by 2010. This past year, we saw tremendous gains and success in all areas of our programs including recycling, toxics reduction, green building, educational outreach, environmental justice, energy efficiency, clean air, and urban forest.

One of the most remarkable and proud achievements that all San Franciscans should take pride in is our phenomenal 67% diversion rate—one of the highest recycling rates in the country. The City is also well aware of the dangers of toxic chemicals. Today, drop-off facilities for the proper disposal of hazardous waste products such as latex paint, used motor oil, and needles have expanded to include mercury containing thermometers and fluorescent lights, and obsolete electronic products. Our School Education Program implemented not only recycling in classrooms, but also helped start an organics collection for composting in over fifty schools. Thousands of Bayview Hunter's Point and Potrero Hill residents were educated and made aware of pollution in their communities. Furthermore, the City is researching renewable forms of energy including what's called Tidal Electricity, a system that would harness ocean waves under the Golden Gate Bridge to generate energy. Thus, helping to close down age-old polluting power plants known to burden residents. In the meantime, we created the infrastructure to provide tax incentives for those who commute to work.

Our goal is to make our planet a safer place for future generations. Together, with the United Nations Environmental Programme, San Francisco hosted World Environment Day to celebrate the achievement of our efforts and to create a working partnership with major international cities. The result was an historical celebration bringing more than sixty mayors from around the world to create an agreement that sets a course of action to protect our environment.

There is much more store for SF Environment. We can make San Francisco a model of sustainability for the planet. One in which we encourage sustainable businesses to strengthen our economy, one in which we integrate sustainability into our planning processes, our decision-making, and our renewed determination to ensure environmental equity for all our residents. Our legacy depends the continued commitment from not only the City, but from all San Franciscans that call this place "home."

The Department of the Environment's (SF Environment's) mission is to improve, enhance, and preserve the environment, and to promote San Francisco's long-term wellbeing.

SF Environment does this by developing innovative, practical and wide-ranging environmental programs, fostering groundbreaking legislation, and educating the public by providing comprehensive and easily accessible information on a wide range of sustainable practices.

In addition to our historic function of providing environmental policy direction for the Mayor and Board of Supervisors, SF Environment delivers service programs for San Francisco residents and businesses including recycling, toxics reduction, environmental justice grants, energy efficiency, benefits for commuters, and coordination of urban forest issues

This report highlights the achievements and upcoming goals of the department for the year.

Recycling

San Francisco continues to make huge strides in the area of recycling. In 2004, San Francisco filed its latest recycling figures with the State of California, which showed a 67% recycling rate—up from 63% from the year before. San Franciscans generated about 1,169,169 tons of waste with 1,180, 478 tons of waste being diverted through reuse, recycling, composted, or through other source reduction efforts. This is the lowest amount of waste going into the landfill in more than twenty years.

There are several key factors to the City's success. The innovative Fantastic Three Program is a comprehensive recycling and composting system available to all residences and businesses 2004. SF Environment also worked with partnering agencies to increase residential composting in various districts. The Fantastic Three Program increased recycling collection by over 7% to top 100,000 tons that were collected. In addition, the commercial sector has also played an important role to the diversion rate.

S.F. Recycling Program provides direct assistance to businesses to increase composting and recycling. In 2004, the program assisted with the implementation of deskside commingled recycling in office buildings and in the guestrooms of local hotels. In addition, SBC Ball Park, Moscone Convention Center, the Ferry Building, Pier 39, the Cliff House, restaurants around the City, hotels including the Hyatt Regency, and Whole Foods markets and regional distribution centers are now collecting food scraps. Altogether, organic materials collection increased by 9% to hit 80,000 tons for the year.

Despite the decline in construction projects, Construction and Demolition (C&D) recycling and reuse efforts was in full force. SF Environment worked with staff from the Mayor's office and Supervisor Fiona Ma to introduce a Construction and Demolition ordinance that would require mandatory recycling at construction sites to capture this significant waste stream.

San Francisco is one city that practices what it preaches. The recycling program's city government staff helped departments save more than $350,000 this past year through conservation methods and the reduction of waste hauling costs and fees. Since the enactment of the Resource Conservation Ordinance (RCO), SF Environment saw one of the highest compliant rates among city departments. An estimated 83% of City departments participated and submitted waste questionnaires. Recycling coordinators were also identified at various department facilities. Their efforts helped the reduce waste that would normally head to the landfill. The RCO calls for agencies to adopt measures to reduce waste and conserve on resources including the use of double-sided paper and purchasing recycled products.

San Francisco continues to be a model for other cities, states, and countries. The Department of the Environment hosted the annual National Recycling Conference (NRC) at the Moscone Center with

hundreds of people attending to learn about issues and solutions in the world of recycling. The conference also showcased the City's award winning waste reduction programs.

Toxics Reduction and Green Building

The San Francisco Toxics Reduction Program works to provide residents, businesses, and city-employees with services to help reduce toxic chemicals in the environment. The program has a residential, commercial, and city government focus. In 2004, the program gained momentum with its forthcoming programs and initiatives. Furthermore, the program administers historical policies that establish the City's role in environmental leadership.

Cleaning the home

SF Environment recognizes that toxic materials can sit in and around the house for a number of years. Cleaning products, batteries, used motor oil, paint, and many other types of all-purpose chemicals accumulate over time. We spearheaded a number of programs for residents to properly dispose of these materials. Whether through convenient drop-off locations, through special community collection events, or through the household hazardous waste facility, San Francisco was able to collect more than one million pounds of toxic waste from homes. Of that, more than 85% of it were recycled, recovered, or reused.

SF Environment worked closely with businesses and community organizations to provide and expand drop-off/collection locations for common toxic household materials including batteries, used motor oil and filters, latex paint, cellular phones, fluorescent lights/bulbs, used needles, and mercury thermometers. Here are a few successful programs in 2004:

Filter Collection at Certified Used Motor Oil Collection Sites: Through a partnership with SF Environment, dozens of local mechanic shops and automotive retail stores serve as used motor oil drop-off sites for local residents. Efforts are in process to add filter collection at all oil collection sites. In 2004, five sites began filter collection as part of a pilot project to test this new service.

Fluorescent Lights Drop-Off Sites: Through a grant from the California Integrated Waste Management Board, we established thirteen convenient drop-off locations throughout the City for residents to recycle mercury containing fluorescent lights. Locations include hardware and lighting retail shops, in addition to several community centers. In the first year of the program, we collected more than 2500 lights, including 4 & 8 ft tubes and compact fluorescent lamps.

Home Toxic Collection Pilot Projects: As a way to access potential permanent programs, we offered limited home collection services for residents in various neighborhood in the form of pilot projects. Current home collections services are free to all senior and disabled residents, and free to only residents with latex paint or used motor oil. The pilot collections evaluated the frequency of use, quantity of toxic waste generated, and other information necessary to grow the program. Based on the results of the program, expansion of service currently in consideration for 2006.

And we are currently in the process of supporting the infrastructure to expand proper electronic waste recycling and disposal efforts.

A number of neighborhood collection events were also arranged as means to provide convenient disposal opportunities for area residents. The events have been popular among residents —allowing them to drive up to collection events without ever having to leave the vehicle.

Mission/Potrero District –In conjunction with SF Recycling & Disposal, we held a one-day household toxic waste collection event at the Mission Fire Department Training Academy. Approximately 16,000 pounds of toxic waste from just over 200 local residents were collected.

Sunset District – We held a joint used motor oil collection & lawnmower exchange event with the Bay Area Air Quality Management District (BAAQMD) at an elementary school lot in the Sunset. Around one hundred local residents brought in a total of 500 gallons of used motor oil and another 217 oil filers for proper disposal. Around twenty gas-powered lawnmowers were also swamped for an electrical version.

The following month, in conjunction with SF Recycling & Disposal, we held another one-day household toxic waste collection event at the Oceanside Treatment Plant. Approximately 20,000 pounds of toxic waste from 340 local residents were again collected.

Chinatown – In August, we partnered with the Clean City Coalition to hold a one-day used motor oil & bulky item collection event. While only a small quantity of motor oil was collected, the event provided an opportunity to educate hundreds of Chinatown residents on the City's environmental services and programs.

SF Environment continues to increase the collection of mercury containing items from San Francisco households, through mercury thermometer exchange programs and the start of the fluorescent lamp collection programs.

In 2004, SF Environment commissioned a report on the Cultural Use of Mercury. The draft report focused on the current state of knowledge about the health and environmental concerns associated with the cultural use of mercury in religious rituals and herbal and homeopathic remedies. It discussed the cultural practices associated with mercury use, the distribution of mercury for use in cultural rituals and medicines, the health and environmental hazards associated with such practices, and the availability of safer alternatives. The results of the report will be used to determine a course of action for the City to facilitate to reduce the cultural use of mercury overall.

City takes lead on toxic reduction

SF Environment receives international recognition for its outstanding work for the reduction of toxic materials within city government. As an agency working for the best interest of the public, it is important to put words into action. Our aim is to initiate programs and policies that help set the standard for other cities, states, and countries. When it comes to the health, wellbeing, and preservation of this City, we set the bar high with a number of hard-hitting programs.

Integrated Pest Management Program Continuing to Grow

SF Environment's extensive Integrated Pest Management Program (IPM) continued its role to help tackle the unnecessary use of toxic pesticides on all public property. The use of all pesticides on city property has declined by 70-82% since the program began in 1996. The use of the most popular herbicide, Roundup, has declined by 91% since 1996. In addition, the quality and ingredient of pesticides has shifted dramatically towards less-toxic options. Since we first began tracking and

monitoring pesticide usage in 1999, the use of the **most toxic** pesticide products has declined by 37-66 percent.

Working with SF Environment, other City departments have steadily improved their pest management programs by experimenting with innovative, reduced-risk methods. For example, gardeners from the S.F. Public Utilities Commission (PUC), the Department of Public Works (DPW), and the Recreation and Parks Department were trained to use propane torches for weed management. The PUC expanded its use of goats for vegetation management along right-of-way areas. The Port conducted a pilot study on the use of mycorrhizal fungi to increase plant health. The Department of Recreation and Parks implemented the use of compost tea as a means to lower fungicide use on golf courses, and the Conservatory of Flowers has an ongoing biological control program using beneficial insects to combat pest populations in the greenhouses.

The City's Reduced Risk Pesticide List was further refined through a public process that included input from both City staff and the public. The result: eleven pesticide products were removed from the list, including four products in the most hazardous category. Meanwhile, nine new products were added, six of which are in the least toxic hazard category, and none of which are in the most hazardous category. City staff is open to and engaged in the process of trying new least toxic products. Several products in the lease toxic category were tried over the past year; some were effective and we added to the list, while two proved ineffective and were not added (one was clove oil for weeds, the other was a corn cob product for ground squirrels).

Educating the City

An important element of the IPM Program is to keep City staff abreast of current developments. SF Environment as well as partnering agencies provided assistance and a wide variety of training workshops in regards to issues.

IPM Conference:
More than 225 people from all over California attended this annual, all-day event. San Francisco Department of the Environment Director Jared Blumenfeld presented several Environmental Service Awards. This year in addition to several City staff members, awards were presented to outside cooperators who have been instrumental in the success of the IPM Program. Awardees include:

***Bill Del Carlo**, San Francisco Public Utilities Commission, *Lifetime Service Award*
***Jane Herman**, Right-of-Way Manager, San Francisco Public Utilities Commission
***Pat Macaulay**, Superintendent of Sharp Park Golf Course, Dept. of Recreation and Parks
***Dr. Don Mahone**, Horticulture Manager, Strybing Arboretum Society
***Dr. Mary Louise Flint**, University of California Statewide Integrated Pest Management Program, *Lifetime Service Award*
***Stephan Orme and Susan Kegle ,**Pesticide Action Network- North America (PANNA)

Technical Advisory Committee:
Communication is essential when it comes to pest management. Coordinators from seven City departments gather each month to compare notes and hear about new techniques. These monthly, interdepartmental meetings called the Technical Advisory Committee, have now been an ongoing feature of the IPM program for the past nine years. Special features included a tour of the Contra Costa County mosquito fish breeding facility, informative discussions on turf management, eco-herbicides, ground squirrel management, soil health, among others.

IPM trainings:
SF Environment organized four pesticide application safety/IPM trainings, six trainings in the use of propane torches (a.k.a. 'weed flamers') as alternatives to herbicides. Additionally we held an all-day Goat Summit to explore the effective use of goatherds for vegetation management, and we coordinated with Recreation and Parks Department to offer trainings on native plants and a half-day hands-on training on gopher control. Over 400 City staff attended the trainings.

Outreach events:
SF Environment staff hosted educational booths at several public events including the Summer Gardening Fair, Lunar New Year Plant Sale, University of San Francisco Plant Sale, San Francisco City College Career Day, and several Strybing Arboretum monthly plant sales. These events provided SF Environment and the general public the opportunity to ask questions and exchange information about safe and less toxic forms of gardening approaches.

Interdepartmental Coordination for Rat and Mosquito Control:
SF Environment assisted on two citywide abatement campaigns. As part of the "Rat Abatement " campaign headed by the Department of Public Works, SF Environment acted as a liaison between the city's pest control companies and city departments. Additionally, SF Environment assisted with the creation and production of outreach materials. Staff was also involved in the "Fight the Bite" campaign efforts to educate staff and residents about how to protect themselves against mosquito bites and West Nile Virus. Participation included brochure and web design, content, production and distribution, as well as publication of articles and advertisements about mosquito prevention and bite protection.

Purchasing the least harmful products for our City

After two years in the making, involving approximately twenty meetings with community groups and other City departments, Mayor Gavin Newsom signed the landmark **Precautionary Purchasing Ordinance** on June 17, 2005. The Ordinance, spearheaded by SF Environment, represents the first full working example under the City's Precautionary Principle Ordinance. The Precautionary Principal Ordinance was adopted to direct policy; specifically, pertaining to City purchasing. Although a few other local and state governments have enacted green purchasing policies, San Francisco's is unique in its ambition and breadth.

Under the Precautionary Principle, the City is required to take an "anticipatory action to prevent harm" to human health and the environment in its operations, by means of a transparent, science-based analysis of the alternatives available, their costs and their potential impacts. The Precautionary Purchasing Ordinance (PPO) applies these ideas to the $800 million/year City purchasing process. The PPO establishes a process for prioritizing categories of products including those used for cleaning, fleet maintenance, degreasing, graffiti removal, and many other commonly used products that are purchased by the City. The products are evaluated by its potential health and environmental impacts. Those with the highest priority will become "Targeted Product Categories." Through a public process, SF Environment will then develop a criteria for acceptable products within the Targeted Product Categories, and work with the Office of Contract Administration (OCA) to develop citywide term contracts for the purchase of these "green" products. For the targeted categories, all City departments will be required to purchase commodities only from the citywide term contract, unless they receive a waiver from OCA. Some product purchasing limitations already in existence before the Ordinance – such as batteries or MTBE fuel additives – will now be administered as regulations under the purchasing ordinance.

The PPO replaces the Environmentally Preferable Purchasing Ordinance. This ordinance required a three-year pilot program during which City departments surveyed the use of chemical products; established standards or criteria for evaluating the most environmentally preferred products for performing a certain task; and evaluated whether the use of chemical products could be reduced by product substitution or changes in work practices. The Department of the Environment was the lead agency for coordination of the pilot program. The study concluded that for most product categories, environmentally preferable products are available, effective, and cost-competitive with traditional products. It also estimated that purchase of these products could reduce exposure to risky chemicals by as much as 98 percent in fleet maintenance products, 31 percent in building maintenance products, and 20 percent in janitorial products. Based on the findings of the pilot program, and as required by the ordinance, the Commission on the Environment recommended that the Board of Supervisors adopt legislation enacting a City-wide Environmental Preferable Purchasing Program.

Currently, SF Environment is proceeding to implement the PPO through a series of meetings with OCA, City "end-users," and community groups. The first steps will be to define public participation guidelines, as required by the ordinance, and establish Technical Advisory Committees to help identify appropriate Targeted Product Categories.

Environmentally Preferable Purchasing: Janitorial Cleaners Contract
SFE began working with OCA on a contract pertaining to the purchase of janitorial cleaning products, about a year before the passage of the PPO. The contract was successfully put out for bid in June 2005 and incorporated the criteria and product performance screenings conducted under the Environmentally Preferable Purchasing Pilot Program. It designated four product categories as fully "green" including general-purpose cleaners, cleaners/degreasers, window cleaners, and bathroom cleaners. The pilot program estimated that a 20% reduction in exposure to hazardous chemicals is possible for San Francisco janitorial staff; and if successful, the contract could make progress toward that goal, while further shrinking the City's environmental footprint.

Environmentally Preferable Purchasing: Office Depot and Batteries Contract
In coordination with SF Environment's recycling group, the city toxics group worked to ensure only rechargeable batteries was available on the new office supplies contract, which was awarded to Office Depot. This implementation of the Resource Conservation Ordinance (RCO) was paired with close coordination with Office Depot to ensure good product selection, and purchaser education though the on-line purchasing system. A fact sheet on battery purchasing was developed to answer purchaser questions whenever they attempt to order disposable alkaline batteries. Trainings will be provided on rechargeable battery requirements.

Environmentally Preferable Purchasing: Lamps Contract
The lamps contract was awarded in March and has several environmental and economic improvements over the last contract. It requires vendors to sell only low mercury, long life, and energy efficient lamps to City departments. Only the most efficient ballasts are offered, and all exit signs and bulbs will use the high-efficiency, long-life Light Emitting Diode (LED) technology. These provisions are expected to save the City money on fewer lamp purchases, less frequent disposal costs, lower labor costs, and lower energy costs. In addition, this contract was awarded to two vendors, stimulating greater price competition than in the past.

Helping Businesses

SF Environment assists San Francisco businesses with the proper management and disposal of hazardous waste materials, while providing ways to reduce hazardous waste use and resources to identify less toxic alternatives.

Assisting Dental Practices:

In 2004, SFE continued outreach efforts on the **Dental Mercury Reduction Program** in collaboration with the Public Utilities Commission. As part of the program, a wide variety of resources, events and training sessions were undertaken to encourage dentists to install amalgam removal equipment and to train them on proper management and disposal of amalgam and other hazardous wastes generated. They include:

Hazardous Waste Management and Amalgam BMP Trainings: SFE conducted a series of 5 workshops for local dental offices to educate them on the proper management and disposal of hazardous waste and the proper implementation of amalgam best management practices. The trainings were conducted at different locations in San Francisco and during different times for convenience. Some locations include the Civic Center area and Golden Gate Park area. Training was also conducted at 450 Sutter building where approximately 100 dental practices operate.

Dental Pollution Prevention Symposium: SFE hosted a Symposium for all the jurisdictions neighboring San Francisco, to present information and findings on San Francisco's dental pollution prevention program. SFE also invited representatives of King County – Seattle, Metropolitan Council Environmental Services, Naval Institute of Dental and Biomedical Research, East Bay MUD to present their findings on their dental programs. The Symposium was a success with well more than 80 attendees.

Assisting Healthcare Facilities:

SFE received a grant from the local Environmental Protection Agency (EPA) – Region 9 to work with local healthcare facilities to help them incorporate pollution prevention into their daily operations. As part of the effort, SFE conducted a survey to assess the needs and identify environmental concerns at local hospitals. As a result, we will be working with healthcare professionals in the coming months the areas of concern.

Recognizing businesses:

SFE worked with the Department of Public Health (DPH) and SF Public Utilities Commission (PUC) to design and develop a **San Francisco Green Business Program** to recognize businesses operating in an environmentally responsible way in the areas of energy conservation, water conservation, solid waste management and pollution prevention. In 2004, SFE expanded the SF Green Business Program and awarded the Green Business recognition to twenty-one businesses. Currently, the program assists over sixty enrolled businesses with environmental compliance and resource conservation efforts.
To honor and recognize Green Business Awardees, SFE, DPH, and PUC hosted a special reception during the week of the U.N. World Environment Day week. The event was also made open to the public who were interested in learning about the program or interested in enrolling in the program. The event was attended by 200 people.

Green Building

Green Homes and Buildings are designed, constructed, renovated, operated, and reused to benefit the economy, enhance the environment, and provide healthy, productive places for citizens to live, work, and visit. SF Environment's Green Building Program promotes residential, commercial and municipal green building efforts through policy development, outreach and training and technical expertise.

In 2004, the San Francisco Board of Supervisors adopted the Green Building Ordinance. The ordinance mandates a LEED® Leadership in Energy and Environmental Design, Silver certification on all new construction, renovations, and additions on municipal buildings. LEED® Silver is a national standard for developing high-performance and sustainable buildings set forth by the U.S. Green Building Council. The buildings are rated on a four-step scale from lowest to highest: LEED Certified, LEED Silver, LEED Gold, and LEED Platinum. LEED™ criteria evaluate a building's environmental performance from a "whole building" perspective, over the course of a building's lifecycle, which provides a definitive standard for what constitutes a green building.

SF Environment provides extensive outreach and training opportunities for City design professionals. Through a grant from the EPA, we provided fee subsidies for selected City staff to take LEED trainings and the LEED Accredited Professional exam resulting in 32 LEED Accredited Professionals throughout seven major departments. These specially trained and accredited staff will help manage the many municipal construction projects that will be achieving the LEED Silver level of environmental performance. SF Environment works in cooperation with the San Francisco Public Utilities Commission to improve energy and water efficiency in municipal buildings. SF Environment also partnered with the Department of Building Inspection to initiate a Green Building Code Review Committee to reduce code barriers and allow for higher environmental performance of municipal as well as commercial and residential projects.

SF Environment monitors, evaluates and reports on municipal green building projects and provides green building technical support to the City's design teams. San Francisco's growing number of municipal green building projects includes the following:

- **New California Academy of Sciences (LEED Platinum goal)**
- **Laguna Honda Hospital Replacement (LEED Certified goal)**
- **SFPUC Operations Center (LEED Silver goal)**
- **Treasure Island Redevelopment (LEED Silver minimum with goal of LEED Gold)**
- **Transbay Terminal & Redevelopment Area (goal not yet established)**
- **EcoCenter (green remodel at SF Environment offices)**
- **Moscone West Convention Center (80%+ demolition waste recovery)**
- **West End Pavilion (community meeting and events center)**
- **Visitacion Valley Recreation Center**
- **Parque Niño Unidos Recreation Center**
- **Islais Creek Muni Operations and Maintenance Facility**

Greening the City

In October, SF Environment launched a Green Building component to specifically target residents and businesses—working parallel with the municipal program. Green Buildings are becoming increasingly popular because of its overall cost savings and health benefits. The Residential and Commercial Program focuses on legislative/policy efforts to accelerate the rate of green homes and commercial buildings being remodeled and built in San Francisco; technical support to incorporate

comprehensive green building goals; and outreach to educate the respective communities about the benefits of- and resources for- green building.

Initiatives underway:

- **Working with the California Integrated Waste Management Board (CIWMB) to endorse Statewide Model Residential Green Building Guidelines. These guidelines will provide the framework for reliable residential green building and enable contractors and developers to cross city/county boundaries using consistently accepted guidelines.**
- **Organizing a National Association of the Remodeling Industry (NARI) Green Building Professional Certification Class to train contractors about green building strategies, products, and marketing.**
- **Populating the Build it Green Materials Database with San Francisco specific data. This database will provide a comprehensive resource for identifying and locating green building materials in San Francisco.**
- **Green building training/brown bag sessions for Inspectors at the Department of Building Inspection and to design professionals to introduce green building terminology, building strategies, and new building products.**
- **Conducting green building tours to educate building professionals, building owners, and tenants about the benefits of green building**
- **Building permit preference for LEED Platinum buildings (working with Department of Building Inspection).**
- **Green roof Task Force participation to address the opportunity to influence storm water management through building design and operation.**

Environmental Justice Program

San Francisco's Environmental Justice (EJ) Program provides support to community groups serving low-income neighborhoods, to address environmental and related health concerns. Specifically, the EJ Program focuses on environmental, energy and food security concerns that are burdening the Bayview Hunters Point and Potrero Hill neighborhoods -- where several major sources of pollution are located, including the City's two fossil-fueled power plants and a toxic-contaminated U.S. Naval Shipyard. The EJ Program administers a special grants program, which was originally funded with $13 million appropriated from the State of California as mitigation for the power plants in the Bayview Hunters Point (BVHP) and Potrero Hill neighborhoods. On an annual basis, SF Environment disburses up to $500,000 in grant funds to non-profit groups serving these neighborhoods. In addition, the EJ Program provides services to reduce air pollution, promote energy efficiency and renewable energy systems, and address issues of food security.

The following non-profit groups were able to meet the following goals with support from the EJ Program grant funds:

Bayview Hunters Point Community Advocates completed the installation of 40 solar systems on non-profit buildings and low-income homes in the Bayview Hunters Point community and helped local residents develop job-training skills.

San Francisco Community Power Co-op completed its 3-year project, which involved training a team of local residents and developing a membership base of over 1,500 residents and businesses.

Over the three-year period, the SF Community Power Co-op provided free or low-cost energy efficient appliances and installed a variety of energy efficiency measures, resulting in over 1 million kWh of energy savings. This work included: retiring several hundred old refrigerators and freezers and replacing them with energy efficiency models; retrofitting food service equipment with new strip curtains, gaskets, door closures and other energy saving devices; installing over 30 heaters; and distributing over 20,000 compact fluorescent light bulbs.

Housing Conservation & Development Corporation improved energy conservation in the Bayview and Potrero neighborhoods by conducting residential energy retrofits, weatherizingof buildings and other conservation measures in 275 homes, resulting in energy savings of over 122,000 kWh annually over the lifetime of the improvements.

Girls 2000 distributed over 44,000 pounds of food to Bayview residents at its food pantry, and provided job training and employment to local youth to maintain a community garden at the Adam Rogers Park.

Peacekeepers launched a community garden project at the Alice Griffith Housing Complex, also known as Double Rock, and provided employment to local residents. The Double Rock gardeners removed trash and weeds from a large garden and planted crops that will be harvested and sold at the Bayview Hunters Point Farmers' Market.

St. Gregory's Food Pantry opened two new food pantries in the Southeast area—one at Our Lady of the Lourdes Church in Bayview and another at Starr King Elementary School in the Potrero Hill. St. Gregory's recruited and trained over 37 volunteers to operate the food pantries and distributed 56,000 pounds of food to area residents from the new pantries.

All Hallows Garden Residents' Association placed 47 air purifiers in tenant's homes, where many of the residents suffered from respiratory-related ailments. After the air purifiers were placed, the Association conducted follow up visits and found that several tenants experienced some relief from symptoms such as nightly nosebleeds, increased inhaler use, excessive coughing, sneezing and head aches.

The EJ Program also developed several new projects during 2004:

The EJ Program worked with regional and state agencies and a local non-profit group to operate an air monitoring station, called the Bayview Hunters Point Community Air Monitoring Project (BayCAMP), located at the corner of Progress Street and Whitney Young Circle. The air monitoring station collected air quality data on several dozen pollutants that will help provide a better understanding of the ambient air quality conditions in the Southeast area of the City.

Funding was secured to launch a new farmers' market in Bayview Hunters Point, enabling local residents to obtain affordable, fresh produce and healthy, prepared foods. The EJ Program is working with local non-profit groups to promote local interest in fresh produce and develop a customer base for the farmers' market.

Staff worked with the Environmental Law and Justice Clinic of Golden Gate University and US EPA to organize an educational training workshop for community groups on the federal Clean Air Act, and helped organize a roundtable discussion to explore how governmental regulators – on the regional, state and federal levels – can better address the air pollution concerns of local communities.

Additionally, SF Environment collaborated with the SF Public Utilities Commission (PUC) to develop a proposed mitigation program for the City's combustion turbine (CT) project, also known as the San

Francisco Electric Reliability Project. This CT project will facilitate the closure of older, polluting power plants located in the Bayview and Potrero neighborhoods and help support a "greener" energy system in San Francisco.

The Commission on the Environment

The mission of the Commission on the Environment is to improve, enhance, and preserve the environment, and to promote San Francisco's long-term environmental wellbeing. The Commission on the Environment has seven members that are appointed by the Mayor. They set policy for SF Environment, and advise the Mayor and Board of Supervisors on environmental matters.

Membership:

The Honorable Nia Crowder, President and Hydrogen and Renewable Energy Committee Chair
The Honorable Christina Desser
The Honorable Angelo King
The Honorable Alan Mok
The Honorable Paul Pelosi Jr., Vice President
The Honorable Arlene Rodriquez, Operations Committee Chair
The Honorable Johanna Wald, Policy Committee Chair

Special thanks to the following former commissioners for their dedicated service to the environment:

The Honorable Randy Hayes
The Honorable Parin Shah
The Honorable Robert Werbe

The Commission on the Environment meets bimonthly on the odd numbered months (January, March, May, July, September and November) on the 4th Tuesday at 5:00 p.m. unless otherwise noted. Meetings are held at City Hall, 1 Dr. Carlton B. Goodlett, Jr. Place, Room 416, in the City and County of San Francisco. All meetings are open to the public. The Commission office is located at 11 Grove Street, San Francisco, California, 94102.

Commission on the Environment Resolutions 2004

The Commission on the Environment sets policy for the Department of the Environment and advises the Mayor and Board of Supervisors on environmental matters, usually in the form of resolutions and legislation. The following is a list of resolutions passed during the year 2004:

Resolution No. 001-04-COE
Reduced Pesticide List
January 14, 2004

Adopting Revised Reduced-Risk Pesticides List 2004.

Resolution No. 002-04-COE
California Quail Recovery Plan
January 14, 2004

Endorsing the Quail Recovery Plan for the City of San Francisco and amendments to the Harding Park Integrated Pest Management Plan.

Resolution No. 003-04-COE
Ocean Protection
July 14, 2004

Urging the Mayor and the Board of Supervisors of the City and County of San Francisco to support SB 1318 and 1319 (Burton and Alpert), and SB 1459 (Alpert), respectively: amending Proposition 50 to provide funds to coastal watershed and wetland protection, creating a California Ocean Protection Act, and to grant authority to the California Fish and Game Commission over all state-managed bottom trawl fisheries.

Resolution No. 004-04-COE
Mercury Health Advisory
July 14, 2004

Urging the Mayor and the Board of Supervisors of the City and County of San Francisco to support US Senate Bill 1939, the Mercury Health Advisory Act of 2003 (Leahy).

Resolution No. 005-04-COE
Amendment of Commission on the Environment Bylaws
September 2, 2004

Resolution approving an amendment of the Commission's Bylaws to change the Commission's regular meeting time to the fourth Tuesday of January, March, May, July, September and November at 5:00 p.m. in City Hall Room 416.

Urban Forest Program

In response to the need for stewardship regarding trees in San Francisco, the Board of Supervisors passed the Urban Forest Council Ordinance. The ordinance calls for the creation of a 15 member Urban Forest Council (UFC) that provide the Mayor and Board of Supervisors with information to help promote a healthy and sustainable urban forest. This includes information on street tree structure, street tree function and value, current management structure and overall plan to improve the urban forest. The council continues to foster intra-agency coordination and comprehensive planning.

To get started, the San Francisco Urban Forest Program conducted and completed several studies in 2004. In conjunction with the USDA Forest Service, the Urban Forest Effects Model (UFORE) was completed. The study provides information on the overall urban forest structure by land use type including species composition, number of trees, size distribution, tree density, health, leaf and tree biomass and species diversity. The study also reveals the amount of pollution removed by an urban forest and analyzes the improvement of air quality throughout the year by percent.

Additionally, the Urban Forest Program and David Binder Research also conducted the Urban Forest Social Assessment; a survey that analyzed feedback from members of individual districts. The study highlighted district goals, participation and support, and preferences for future expenditures and programs.

An Annual Report was also drafted and includes information on the state of trees in the City regarding street tree structure, function and value, management structure, opportunities and proposals for improvements to the urban forest.

The Urban Forest Program helped create and draft the Street Tree Action Plan and was submitted to the Mayor and Board of Supervisors. The plan addresses the health, maintenance, and need of trees based on the Urban Forest Social Assessment survey and the UFORE report. The plan identifies that trees in the City can provide an estimated $7.5 million dollars in environmental and economic benefits each year. Under the proposed Street Tree Action Plan, the Urban Forest Council set an ambitious strategy, outlining the planting of 5,000 new trees every year for the next twenty years at over 127,000 currently empty planting sites.

Currently, the program is drafting the Comprehensive Urban Forest Plan in conjunction with the Planning Department; which will be the standard reference document that defines policies and procedures for the management of the urban forest within the City and County of San Francisco. The Plan will serve city departments, non-profits, community groups and organizations, as well as for the general public.

Creating a lush environment for city neighborhoods

As part of the California Duke Energy settlement, the state administered $250,000 to fund the planting of trees in the community. In partnership with Department of Public Works and Friends of the Urban Forest, SF Environment launched San Francisco's first annual Arbor Day celebration, a festive tree planting event in March during which 240 new trees were planted in the Bayview neighborhood. Overall, the Duke Settlement will fund the the planting and maintenance of 768 new trees in San Francisco's Bayview, Potrero Hill, and Visitacion Valley neighborhoods.

The Urban Forest Council continues to meet monthly and is open to the public. For more information on past and future meetings, please go to www.Sfenvironment.com

School Education

It's been another exciting year for the School Education Program. Aside from the general curriculum the program offers to K-12 students schools, it continued to provide numerous presentations and field trips to students and teachers, kicked off an on-line resource, and partnered with international students during World Environment Day 2005. From innovative lunchroom composting programs to classroom presentations to hands-on gardening activities, field trips, and California state standards-based lesson plans, SF Environment's School Education Program successfully educates over 15,000 students a year in a select variety of environmental topics including those in recycling and water pollution prevention; all which are relevant to the health of our home, our city and our planet.

The School Education Program with the help of Phoebe the Phoenix, a 7ft. tall kid's mascot, launched a website just for kids. The website allow students and teachers to search for information pertaining to the environment. From how to recycle to energy conservation to factsheets, users can navigate through the pages for useful information. The site also includes a teacher's lounge and information to learn how to get involved.

To give students and teachers a real bird's eye view, SF Environment sponsored eight-five trips to recycling and reuse facilities including those to the Transfer Station (a pit stop for garbage and compost before its goes to their next destination), Recycle Central at Pier 96, HANC's Garden for the Environment, Scroungers Center for Reusable Art Parts (SCRAP), to the Presidio Recycling Center, and to the Oceanside Wastewater Treatment Plant. In conjunction with the SF Public Utilities Commission (SFPUC), SF Environment also gave sixty standard based classroom presentations to fifth grade students on water pollution prevention. The program covered topics on the water-cycle, the impact litter has on marine life, proper disposal of household hazardous waste, and biological magnification.

The Food to Flowers! Program teaches students and teachers about composting and how food scraps can be turned into rich organic soil for farming. Through the program, staff was able to get another fifteen schools to sign onto lunch composting in the school cafeterias—adding to a total of more than fifty schools since the program began. Food the Flowers! consistently helps divert over 500 tons of organic matter away from the Altamont Landfill.

As part of the U.N. World Environment Day hosted in San Francisco, the School Education Program partnered with the United Nations Environmental Programme (UNEP). Under the TUNZA Green Reach Pledge, SF Environment worked with five Bay Area youth groups to create a set of environmental agreements that students could take

back to their schools and communities. Eighty-five youth worked on this Pledge, which is being used as a template at the TUNZA International Youth Conference in Bangalore, India, October 2005.

Outreach Program

The Department of the Environment Outreach Program works to provide assistance in the areas of recycling, toxics reduction, environmental justice, school education, energy, clean air, and urban forest. The program maintains relationships with sister agencies, officials, the media, and partnering organizations, and the community to foster the goals of the department; meanwhile, staging a commitment of our services to residents, businesses, and city agencies.

Outreach staff is mindful of the challenges of educating City residents due to its diverse population. As a result, staff worked to develop and create outreach materials regarding information and services available in three languages: English, Spanish, and Cantonese. Additionally, the department launched a website in the Chinese language and is currently developing one in the Spanish language.

SF Environment continues to work to disseminate concise and accurate information to the public regarding our environment and our policies that are set forth to maintain, preserve, and enhance this City we call home.

Putting the lid on global warming

SF Environment's Clean Air Program (CAP) works to reduce automobile emissions by promoting trip reduction, transit incentives, environmentally friendly vehicles, and implementing the Healthy Air and Smog Prevention Ordinance.

CAP recognizes that the role city government plays in reducing greenhouse gas emissions is pivotal. In 2004, CAP worked with various agencies, employees, and

partnered with organizations to initiate a number of projects to address global warming including:

- Maintaining more than six hundred alternative fuel vehicles in the City's fleet including the addition of two hydrogen fuel cell vehicles; which are specifically being used by city staff as a pilot program for research to improve and advance technology for eventual consumer use. A proposal is also under consideration to build a hydrogen fueling station

- Working with the SF Municipal Railway (MUNI) to add zero emission vehicles/buses to its public transit inventory—which is currently at 57%. Alternative fuel projects were also implemented with City taxi-cabs. Today, more than one hundred compressed natural gas (CNG) cabs are operating more than one million miles per month in the City.

- Administering the Commuter Benefits Program where city employees are given a tax incentive to sign up for transit passes. Nearly 3,400 members are part of this program resulting in the reduction of hundreds of pounds reduction of emissions a day. CAP is also rolling out an aggressive outreach campaign aiming to increase participation among local businesses.

- Launching first of its kind program in San Francisco to assist employees during an emergency, called the Emergency Ride Home Program (ERH). The program works with City employees and local businesses, to increase transit usage by addressing commuting concern. Under ERH, employees can be reimbursed for a ride home during emergencies if they commute to work via public transportation. Approximately fifty businesses have enrolled in the program thus far.

- Working with City staff including those at MUNI, the Department of Public Health, the Department of Parking and Traffic (DPT), the City Attorney's office, and the S.F. Fire and Police Departments to encourage the use of the bicycle fleet provided by CAP. In 2004, an additional fifty bicycles and twenty utility trailers were added to the fleet in an effort to replace motorized vehicles. Nearly, ten free bicycle safety-training course were offered to residents staff in collaboration with the San Francisco Bicycle Coalition (SFBC).

- Collaborating with the SF Public Utilities Commission (SFPUC) and the International Council for Local Environmental Initiatives (ICLEI) to create the Climate Action Plan. The plan aims to reduce greenhouse gas emissions by 20% below 1990 levels by the year 2012 by utilizing existing technologies. Included in the Plan are projections from the impact of global warming and outline specific actions to reduce emissions in the key areas of transportation, energy efficiency, renewable energy, and solid waste management. The goal of this plan is higher than those in the Kyoto Protocol.

- Partnering with the San Francisco Municipal Railway (MUNI) to develop a clean air plan called Zero Emissions 2020 that focuses on the purchase of cleaner transit buses including hybrid diesel-electric buses. The plan also discusses the option of purchasing hydrogen fuel cell buses when they become commercially available in the next ten to fifteen years. To move toward that direction, the Municipal Transportation Agency (MTA) approved a Request For Proposal (RFP) to enlist the work from bus manufacturers that will result in the acquisition of a fleet of diesel-electric hybrid buses for MUNI. This will be the first in California where a transit agency purchases the technology, while taking advantage of the California Air Resource Board (CARB) regulations. Other major transit agencies including New York City, Boston, and Seattle have adopted plans to use the hybrid technology within their respective public transportation systems.

- Working with the Bay Area Air Quality Management District (BAAQMD) to implement the District's *Spare the Air Program.* A training session for various San Francisco department managers was also held to educate them about the program and discuss what on-the-job measures can be taken on Spare the Air days that would decrease pollution in the City.

- Developing the City's official telecommuting policy and program where City employees can use telecommuting practices and help reduce vehicle trips into work. This effort is a program of CAP, the Mayor's Office, the Department of Human Resources, Local 21, and other city agencies.

- CAP is the recipient of several awards including: the Clean Air Award by the American Lung Association and the Bay Area's Best Work Place for Commuters by the U.S. Environmental Protection Agency (EPA).

Powering the Way!

The San Francisco Energy Program joined forces with Pacific Gas and Electronic (PG&E) to create the SF Peak Energy Program (SFPEP) for residents and businesses. SFPEP's objective is to reduce energy use during peak seasonal demands to help shut down the Hunters Point Power Plant. In order to do so, the collaboration offered residents and businesses a variety of energy efficient measures. This past year, the program completed its mission with an overall 11 MW energy reduction.

SFPEP wrapped up with staff providing services to more than 3,000 residential units and nearly 4,000 businesses citywide. Assistance included energy audits, cash rebates, the installation of energy efficient technology including fixtures, compact fluorescent lamps, and programmable thermostats. As part of the Torchiere Lamp Exchange project, SFPEP exchanged 3,000 energy guzzling halogen lamps for efficient models. In Chinatown, an estimated 1,700 lamps were swapped during a one-day exchange event. Additionally, the program offered Light Emitting Diode (LED) technology in the form of holiday strands to residents. Exchange locations were available citywide for the public

to bring in old holiday strands for new LED lights, free—resulting in the exchange of 4,000 strands. SF Environment also worked with the Pier 39 Association to use LED lights on their Christmas tree. Pier 39 and hundreds of guests attended the special tree lighting ceremony. The Pier 39 Association saved more than $2,000 by using the LED technology.

Aside from SFPEP, the SF Energy Program continued to identify and implement renewable energy in the form of solar, ocean tides and ocean waves. Generation Solar kicked off to help residents and small businesses install solar panels. Staff worked with more than 340 property owners to access and survey feasible solar panel installations. To date, an estimated thirty-five contracts were signed.

Meanwhile, two Bay Area forces, San Francisco and Oakland, participated in a study regarding ocean wave power with the Electronic Power Research Institute (EPRI). As a result, the City is now evaluating the feasibility of a wave power device installed some eight miles off of Ocean Beach. The device is rated to bring in 750kW of clean energy. To continue San Francisco's next generation of renewable energy, the City partnered with the City of Oakland and Marin County to participate in EPRI's upcoming tidal current study. San Francisco is working to harness the ocean tides under the Golden Gate Bridge as another alternative to renewable energy. Results of the study are slated for April 2006. As a pilot, SF Environment helped site its first urban wind turbine at the Randall Museum. The device is being used as an energy educational display and is funded by the Moore Foundation.

World Environment Day

United Nations World Environment Day is one of the most important events on the international environmental calendar. It is celebrated around the world on June 5, and each year the United Nations selects a major city to host the main celebrations. San Francisco was selected to host World Environment Day 2005, the first time ever in the United States. History was made as the weeklong celebration kicked off with Mayors from around the world and hundreds of community events.

The theme for World Environment Day 2005 was "Green Cities: Where the Future Lives." It was held June 1-5, and featured a series of special events focusing on urban environmental issues such as recycling, renewable energy, resource conservation, environmental justice and public health. Mayors and representatives of the world's largest cities were also invited to visit San Francisco to share ideas and experiences, establish goals for urban environmental improvement, and identify the tools needed to achieve these goals within their respective cities and countries in order to develop the Urban Environmental Accords. The Accords provides a roadmap for environmental improvements in cities—outlining twenty-one actions in the key areas of urban design, transportation, energy, open space, recycling, health, and water. The agreement can be reviewed at www.urbanaccords.org. More than fifty mayors signed the Accords during a

special ceremony at City Hall on June 5 with additional dignitaries and cities continuing to sign on.

World Environment Day is a project of the United Nations Environment Program (UNEP). Since its inception in 1972, World Environment Day has given a human face to environmental issues, and promoted an understanding that communities are pivotal to changing attitudes about the environment. UNEP provides leadership and encourages partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.